

$$\begin{aligned}
 \Sigma \tau &= \tau_c - \tau_{cc} \\
 &= (2.176 \text{ N} \times 0.096 \text{ m}) + (1.47 \text{ N} \times 0.50 \text{ m}) + (1.196 \text{ N} \times 0.735 \text{ m}) + (1.05 \text{ N} \times 0.703 \text{ m}) \\
 &\quad - (1.6 \text{ N} \times 0.088 \text{ m}) - (2.9 \text{ N} \times 0.703 \text{ m}) \\
 &= 0.213 \text{ Nm} + 0.735 \text{ Nm} + 1.05 \text{ Nm} - 0.1408 \text{ Nm} - 2.04 \text{ Nm} \\
 &= -0.18 \text{ Nm}
 \end{aligned}$$

$$-0.18 \text{ Nm}$$

$$\% \text{ error} = \frac{0.18}{0.84} \times 100 = 22.5\%$$

Set ref. mid point

$$\begin{aligned}
 \tau_c - \tau_{cc} &= 1.6 \text{ N} (0.50 - 0.088 \text{ m}) + (1.196 \text{ N} \times (0.88 - 0.5)) \\
 &\quad - 1.9 \text{ N} (0.705 - 0.50) - (2.176 \text{ N} \times (0.50 - 0.096))
 \end{aligned}$$